

In response to that Office Action, please amend the above-identified application as follows:

IN THE CLAIMS:

Please amend Claims 124 and 134-136 to read as follows. A marked-up copy of the amended claims, showing the changes made thereto, is attached. Applicant has also included below the non-amended claims.

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124. (Twice Amended) An outline forming apparatus, comprising:
a storage medium for storing information for a plurality of outline points of a pattern, wherein the information for each of the outline points includes coordinate values of the outline point, a plurality of vector data corresponding to a plurality of weight value ranges, each of the vector data indicating a movement track of the outline point according to a change of a weight value within a corresponding weight value range, and a weight value at which the vector data change;

an acquiring unit, arranged for acquiring a vector datum corresponding to an input weight value from said storage medium based on the weight value at which the vector data change, for each outline point; and

a calculation unit, arranged for calculating coordinate data of each outline point of a pattern to be output, based on the input weight value and the vector data acquired by said acquiring unit.

125. The apparatus according to claim 124, further comprising a sending unit for sending the coordinate data calculated by said calculation unit.

126. The apparatus according to claim 124, wherein the pattern is a character pattern.

127. The apparatus according to claim 124, wherein said storing medium stores a plurality of weight values at which vector data change.

128. The apparatus according to claim 124, wherein the plurality of vector data includes vector data indicating a straight line and vector data indicating a curve of second or higher degree.

129. The apparatus according to claim 124, further comprising an output unit for outputting a pattern formed based on the coordinate data calculated by said calculation unit.

130. The apparatus according to claim 129, wherein said output unit includes a printer.

131. The apparatus according to claim 124, wherein said calculation unit operates on vector data.

132. The apparatus according to claim 124, wherein said storage unit stores degree information indicating degree of a function of vector data.

133. The apparatus according to claim 129, wherein said degree

information includes an information indicating that coordinate data is constant regardless of the change of weight value.

134. (Twice Amended) An outline forming method comprising the steps of:

accessing a memory which stores information for a plurality of outline points of a pattern, wherein the information for each of the outline points includes coordinate values of the outline point, a plurality of vector data corresponding to a plurality of weight value ranges, each of the vector data indicating a movement track of the outline point according to a change of a weight value within a corresponding weight value range, and a weight value at which the vector data change;

acquiring a vector datum corresponding to an input weight value based on the weight value at which the vector data change, for each outline point, by accessing the memory; and

calculating coordinate data of each outline point of a pattern to be output, based on the input weight value and the vector data acquired in the acquiring step.

135. (Amended) A computer program product having a computer readable medium comprising a computer program for forming an outline, the computer program comprising code for performing the steps of:

storing information for a plurality of outline points of a pattern, wherein the information for each of the outline points includes coordinate values of the outline point, a plurality of vector data corresponding to a plurality of weight value ranges, each of the vector data indicating a movement track of the outline point according to a change of a

weight value within a corresponding weight value range, and a weight value at which the vector data change;

acquiring a vector datum corresponding to an input weight value based on the weight value at which the vector data change for each outline point; and

calculating coordinate data of each outline point of a pattern to be output, based on the input weight value and the vector data acquired in said acquiring step.

136. (Amended) A computer readable medium comprising a computer program for forming an outline, the computer program comprising code for performing the steps of:

storing information for a plurality of outline points of a pattern, wherein the information for each of the outline points includes coordinate values of the outline point, a plurality of vector data corresponding to a plurality of weight value ranges, each of the vector data indicating a movement track of the outline point according to a change of a weight value within a corresponding weight value range, and a weight value at which the vector data change;

acquiring a vector datum corresponding to an input weight value based on the weight value at which the vector data change for each outline point; and

calculating coordinate data of each outline point of a pattern to be output, based on the input weight value and the vector data acquired in said acquiring step.